

Ideas-to-think-with: Useful pieces of knowledge about natural selection

Aditi Wagh & Uri Wilensky, *aditiwagh@u.northwestern.edu*
School of Education & Social Policy, Northwestern University

Short presentation

The purpose of this study was to examine productive pieces of knowledge middle school children might have about natural selection. In this study, sixth and eighth grader students were interviewed about a scenario of natural selection. The interview was designed to elicit students' ideas and thinking about how natural selection takes place. The data was analyzed from a knowledge-in-pieces framework to identify productive pieces of knowledge that learners used in reasoning about natural selection in a population of butterflies. Preliminary results indicate that students are able to draw on some pieces of knowledge that are productive in helping them explain natural selection. The results have implications for the design of learning environments to help students learn about microevolution.

Keywords

Evolution, knowledge-in-pieces